TO

160274

IONICS INTERNATIONAL, INC. 10655 Richmond Avenue, Suite 150 Houston, Texas 77042

(800) 4-DIOXIN (713) 972-1037 Fax: 784-1152

FROM: Steve Missler
DATE: $6/2/95$
NAME: Ken Braig DEPT: FAX: 618-332-6520
SUBJECT: Project 8/68 COC dated 4/21/95
Tonics Int. project 95-291
NUMBER OF PAGES (including this one):
If you do not receive a complete transmittal, please contact
Comments: Ken
Place find COC and results of TCDD analyes as
requested. The final data package was
shoped on 5/24/95 following theronging fax
on 5/15/95. Please call it you have any
questions concerning the data
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CONTINY ON SHEET RIEDEL ENVIRONAL ATAL SERVICES, INC. CHAIN OF CUSTODY RECORD

SEE REVERSE FOR INSTRUCTIONS

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INTERNATIONAL, INC.

10655 Richmond Avenue, Suite 150 Houston, Texas 77042

(713) 972-1037 Fax: (713) 784-1152

(800) 4-DIOXIN

May 24, 1995

CASE NARRATIVE

Ionics International Project 95-291

Riedel Environmental Services Project 8168

Objective

Ten soil samples were analyzed for 2,3,7,8-TCDD by the EPA SW 846 Method 8280.

Sample Receiving

Samples were delivered to the laboratory by Federal Express on April 24, 1995. The samples were received in good condition and stored in a refrigerator until analyzed. The following Lab IDs were assigned:

Lab ID	Client ID	File Number
DFBLK B1-025 LS B1-025 3-91-1 3-91-2 3-91-3 3-91-4 3-91-5 3-91-6	Method Blank Lab Spike CSH-6 CSH-8 CSH-10 CSH-14 CSH-16 CSH-18	F11594 F11595 F11624 F11625 F11626 F11627 J10846 F11632
3-91-7 3-91-8 3-91-9 3-91-10	CSH-20 CSH-22 CSH-2 CSH-4	F11633 F116 34 F11635 F11636

Extraction

The samples were extracted according to the requirements of the EPA SW 846 Method 8280. No discrepancies were encountered during extraction and cleanup.

Analysis

The soil samples were analyzed by GC-MS according to the method. Data are reported for 2,3,7,8-TCDD. One sample (CSH-16) had interferences in the internal standard channels that prevented quantification. This sample was determined by high resolution mass spectrometry (as recommended in method 8280) using EPA method 1613. No discrepancies were noted.

Samples that contained analyte concentrations outside of the calibration range are flagged with "J" for below and "E" for above the calibration range.

Quality Control

A Method Blank and Lab Spike were analyzed concurrently with the soil samples. No discrepancies were noted, and the controls met all QC criteria.

Stephen R. Missier,

Lab Manager

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-2

SAMPLE ANALYSIS SUMMARY REPORT Lab Project: 95-291 Lab Sample: 3-91-9

Phone: (713) 972-1037

Fax: (713) 784-1152

Specific analytes	Sam	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.10	ND	2.32	93%	50-150	

REIDEL ENVIRONMENTAL SERVICES, INC. ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-4 SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	San	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.11	ND	2.32	93%	50-150	

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-6

SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	San	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.05	ND	2.32	93%	50-150	

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-8 SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	Sam	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.08	ND	2.32	93%	50-150	

TO

REIDEL ENVIRONMENTAL SERVICES, INC.

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-10 SAMPLE ANALYSIS SUMMARY REPORT Lab Project: 95-291 Lab Sample: 3-91-3

Specific analytes	Sarr	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.03	ND	2.32	93%	50-150	

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ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-14

SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	San	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.06	ND	2.32	93%	50-150	

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REIDEL ENVIRONMENTAL SERVICES, INC. ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 1613

Client Project: 8168 Client Sample: CSH-16 SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	San	ple	Biank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.002	ND	2.32	93%	50-150	

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-18

SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	San	ple	Blank	Lab spike			
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits	
2,3,7,8-TCDD	ND	0.14	ND	2.32	93%	50-150	

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-20

SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	Sample		Blank	Lab spike		
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits
2,3,7,8-TCDD	0.23	0.05	ND	2.32	93%	50-150

ANALYSIS OF POLYCHLORINATED DIOXINS/FURANS BY METHOD 8280

Client Project: 8168 Client Sample: CSH-22

SAMPLE ANALYSIS SUMMARY REPORT

Specific analytes	Sample		Blank	Lab spike		
	Conc (ppb)	DL (ppb)	Conc (ppb)	Conc (ppb)	Rec (%)	QC limits
2,3,7,8-TCDD	ND	0.07	ND	2.32	93%	50-150